NCBI   ≡Nucleotide

| Entrez | PubMed | Nucleotide | Protein | Genome | Structure | PMC | Taxonomy | Boo |

Search Nucleotide ▒ for [   ] [Go] [Clear]

| Limits | Preview/Index | History | Clipboard | Details |

[Display] default ▒ Show: 20 ▒ [Send to] File ▒ [Get Subsequence] [Featu

☐ **1: S75275. RVLG=vasa-like ge...[gi:806463]**   Links

```
LOCUS       S75275                  3030 bp    mRNA    linear   ROD 15-MAY-1995
DEFINITION  RVLG=vasa-like gene protein [rats, Wistar-Imanishi, testis, mRNA,
            3030 nt].
ACCESSION   S75275
VERSION     S75275.1  GI:806463
KEYWORDS    .
SOURCE      Rattus sp.
  ORGANISM  Rattus sp.
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
            Rattus.
REFERENCE   1  (bases 1 to 3030)
  AUTHORS   Komiya,T. and Tanigawa,Y.
  TITLE     Cloning of a gene of the DEAD box protein family which is
            specifically expressed in germ cells in rats
  JOURNAL   Biochem. Biophys. Res. Commun. 207 (1), 405-410 (1995)
  MEDLINE   95160706
   PUBMED   7857296
  REMARK    GenBank staff at the National Library of Medicine created this
            entry [NCBI gibbsq 159937] from the original journal article.
FEATURES             Location/Qualifiers
     source          1..3030
                     /organism="Rattus sp."
                     /mol_type="mRNA"
                     /db_xref="taxon:10118"
     gene            1..3030
                     /gene="RVLG"
                     /note="vasa-like gene protein, RVLG protein"
     CDS             266..2407
                     /gene="RVLG"
                     /note="putative DEAD box protein; This sequence comes from
                     Fig. 1; RVLG protein"
                     /codon_start=1
                     /product="vasa-like gene protein"
                     /protein_id="AAB33364.1"
                     /db_xref="GI:806464"
                     /translation="MGDEDWEAEILKPHVSSYVPVFEKDKYSSGANGDTFNRTSASSS
                     EMEDGPSGRDHFMRSGFSSGRNLGNRDIGESSKRETTSTTGGFGRGKGFGNRGFLNNK
                     FEEGDSSGFWKESTNDCEDTQTRSRGFSKRGGYPDGNDSEASGPFRRGGRDSEYDQDQ
                     GSQRGGGLFGSRKPAASDSGSGDTFQSRSGNARGAYKGLNEEVVTGSGKNSWKSEAEG
                     GESSDIQGPKVTYIPPPPPEDEDSIFAHYQTGINFDKYDTILVEVSGHDAPPAILTFE
                     EANLCQTLNNNIAKAGYTKLTPVQKYSIPIVLAGRDLMACAQTGSGKTAAFLLPILAH
                     MMRDGITASRFKELQEPECIIVAPTRELINQIYLEARKFSFGTCVRAVVIYGGTQFGH
                     SIRQIVQGCNILCATPGRLMDIIGKEKIGLKQVKYLVLDEADRMLDMGFGPEMKKLIS
                     CPGMPSKEQRQTLLFSATFPEEIQRLAGEFLKSNYLFVAVGQVGGACRDVQQSILQVG
                     PVFKKRKLVEILRNIGDERPMVFVETKKKADFIATFLCQEKISTTSIHGDREQREREQ
                     ALGDFRCGKCPVLVATSVAARGLDIENVQHVINFNLPSTIDEYVHRIGRTGRCGNTGR
                     AISFFDTESDNHLAQPLVKVLSDAQQDVPAWLEEIAFSSYAPPSFSNSTRGAVFASFD
                     TRKNFQGKNTLNTAGISSAQAPNPVDDESWD"
```

```
             KAGYTKLTPVQKYTIPIVLAGRDLMACAQTGSGKTAAFLLPILAHMMRDGITASRFKE
             LQEPECIIVAPTRELINQIYLEARKFSFGTCVISVVIYGGTQFGHSVRQIVQGCNILC
             ATPGRLMDIIGKEKIGLKQVKYLVLDEADSMLDMGFAPEIKKLISCPGMPSKEQHQTL
             LFSATFPEEIQRLAGDFLKSNYLFVAVGQVGGACRDVQQTILQVGQYQKEKSLLRFYE
             NIGDERTMVFVETKKKADFIATFLCQEKISSTSIHGDREQREREQALGDFRCGKCPVL
             VATSVAARGLDIENVQHVINFDLPSTIDEYVHRIGRTGRCGNTGRAISFFDTDSDNHL
             AQPLVKVLSDAQQDVPAWLEEIAFSTYVPPSFSSSTRGGAVFASVDTRKNYQGKAHVE
             YSGDFFFTSSQSS"
ORIGIN
        1 tttggaagag gaaagggctt tggaaacaga ggttttttaa ataacaagtt tgaagaaggt
       61 gatagctctg gtttctggaa agagtctaat aatgactgtg aagataatca gactcgaagc
      121 agagggtttt ccaagcgagg tggctgccaa gatggaaacg attcagaagc atcaggcccg
      181 ttcagaagag ggggaagagg cagtttccga ggctgccgtg gaggatttgg tctaggaaga
      241 ccaaatagtg aatctgacca agatcagggg acacagtgtg gtggtggctt tctggttcta
      301 gggaaaccag cagcaagtga ttcaggcaat ggtgacactt accaaagcag aagtggaagt
      361 ggtcgaggtg gttacaaagg tttaaatgaa gaagtagtaa caggttctgg aaagaattct
      421 tggaagtcag aaactgaagg aggtgaaagc agtgatagtc aaggtccaaa agtgacatat
      481 ataccccccc ctccaccaga ggatgaggac tccatctttg cacattatca gacaggcata
      541 aactttgata aatatgacac catacttgtt gaagtatctg gacatgatgc accaccggca
      601 attttgactt ttgaagaagc taatctctgt cagacactga ataacaacat tcgtaaagct
      661 ggctatacta agcttactcc tgtgcagaag tacacgattc ccattgtatt agcaggacga
      721 gatttgatgg cttgtgctca aacagggtct gggaagactg cagcttttct cttgcctatt
      781 ttggctcata tgatgcggga tggaataact gccagtcgct ttaaagaact gcaggaacca
      841 gagtgtatta ttgtagcacc aactcgagaa ctgatcaacc aaatttactt ggaagccaga
      901 aaattttctt ttgggacttg tgtaatatct gtggtcatat atggagggac ccagtttggt
      961 cattcagttc gacagatagt acaagggtgt aacatattgt gtgctactcc agggaggctg
     1021 atggacatca taggcaaaga aaagattggc ctcaaacaag tcaagtactt agttttggat
     1081 gaagctgata gcatgctaga catgggtttt gcaccagaga tcaagaaact aatttcttgt
     1141 ccaggaatgc catcaaagga acaacaccaa acccttttat tcagtgctac ttttccagaa
     1201 gaaatccaga ggttggctgg ggattttcta aagtccaatt atttgtttgt tgctgttggg
     1261 caagtgggag gagcttgcag agatgttcag cagacgattc ttcaagttgg ccagtatcaa
     1321 aaagagaaaa gcttgttgag attctacgaa aacataggtg atgaagaac tatggtcttt
     1381 gttgaaacca agaaaaaagc cgatttcatt gcaacttttc tttgtcaaga aaaaatatca
     1441 agtacaagta ttcatggtga tcgggaacag agggagagag agcaagctct tggagatttt
     1501 cgctgtggaa agtgcccagt tcttgttgct acttcagtgg ctgccagagg cttgatatt
     1561 gaaaatgttc aacatgttat caattttgac cttccttcta ccattgatga gtatgttcat
     1621 cgaattggac gcactggccg ctgtggaaat actggcagag cgatttcttt ttttgatact
     1681 gactctgata atcatttagc acagcctcta gttaaagtac tgtcagacgc tcaacaggat
     1741 gtccccgcat ggctagaaga gattgccttc agtacctatg tgcctcccag cttcagtagc
     1801 agcacaagag ggggggccgt gtttgcatct gttgacacga ggaagaatta ccagggcaaa
     1861 gcacacgttg aatacagcgg ggatttcttc ttcacaagct cccaatccag ttgatgacga
     1921 atcatgggcc
//
```

May 3 2004 07:33:01

☐ **1: AB005147.** Danio rerio mRNA ...[gi:2463518]

```
LOCUS       AB005147               2865 bp    mRNA    linear   VRT 01-OCT-1997
DEFINITION  Danio rerio mRNA for vas, complete cds.
ACCESSION   AB005147
VERSION     AB005147.1  GI:2463518
KEYWORDS    vas.
SOURCE      Danio rerio (zebrafish)
  ORGANISM  Danio rerio
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
            Cypriniformes; Cyprinidae; Danio.
REFERENCE   1  (sites)
  AUTHORS   Yoon,C., Kawakami,K. and Hopkins,N.
  TITLE     Zebrafish vasa homologue RNA is localized to the cleavage planes of
            2- and 4-cell-stage embryos and is expressed in the primordial germ
            cells
  JOURNAL   Development 124 (16), 3157-3165 (1997)
  MEDLINE   97417583
   PUBMED   9272956
REFERENCE   2  (bases 1 to 2865)
  AUTHORS   Kawakami,K.
  TITLE     Direct Submission
  JOURNAL   Submitted (25-JUN-1997) Koichi Kawakami, The Institute of Medical
            Science, The University of Tokyo, Department of Tumor Biology;
            Shiroganedai 4-6-1, Minato-ku, Tokyo 108, Japan
            (E-mail:kawakami@ims.u-tokyo.ac.jp, Tel:81-3-5449-5308)
FEATURES             Location/Qualifiers
     source          1..2865
                     /organism="Danio rerio"
                     /mol_type="mRNA"
                     /db_xref="taxon:7955"
     CDS             71..2221
                     /codon_start=1
                     /product="vas"
                     /protein_id="BAA22535.1"
                     /db_xref="GI:2463519"
                     /translation="MDDWEEDQSPVVSCSSGFGLGSNGSDGGFKSFYTGGAGNDKSNS
                     EGTEGSSWKMTGDSFRGRGGRGGSRGGRGGFSGFKSEIDENGSDGGWNGGESRGRGRG
                     GFRGGFRSGSRDENDENRNDDGWKGGESRGRGRGGFGGSFRGGFRDGGNEDTGRRGFG
                     RENNENGNDEGGEGRGRGRGGFRGGFRDGGGDESGKRGFGRGGFRGRNEEVFSKVTTA
                     DKLDQEGSENAGPKVVYVPPPPPEEESSIFSHYATGINFDKYDDILVDVSGSNPPKAI
                     MTFEEAGLCDSLSKNVSKSGYVKPTPVQKHGIPIISAGRDLMACAQTGSGKTAAFLLP
                     ILQRFMTDGVAASKFSEIQEPEAIIVAPTRELINQIYLEARKFAYGTCVRPVVVYGGI
                     NTGYTIREVLKGCNVLCATPGRLHDLIGRGKIGLSKVRYLVLDEADRMLDMGFEPEMR
                     KLVASPGMPSKEERQTLMFSATYPEDIQRMAADFLKVDYIFLAVGVVGGACSDVEQTV
                     VQVDQYSKRDQLLELLRATGNERTMVFVETKRSADFIATFLCQEKISTTSIHGDREQR
                     EREKALSDFRLGHCPVLVATSVAARGLDIEQVQHVVNFDMPSSIDEYVHRIGRTGRCG
                     NTGRAVSFFNPESDTPLARSLVKVLSGAQQVVPKWLEEVAFSAHGTTGFNPRGKVFAS
                     TDSRKGGSFKSDEPPPSQTSAPSAAAAADDEEWE"
ORIGIN
        1 tcaggctctt cacgcgtgtc cacctgctac cggctcttct gaaaaaaagt ctcacctaaa
       61 attacccaat atggatgact gggaggaaga tcagagtccc gttgtgtctt gcagctcagg
      121 atttggtcta ggctcaaatg gttctgatgg aggattcaag agcttttata caggaggtgc
```

```
 181 tggaaatgac aagtcaaaca gtgaaggtac tgaaggtagc tcatggaaaa tgactggtga
 241 ttcgttcagg gggagaggag gcaggggagg atcacgagga ggcagaggag gctttagcgg
 301 ttttaaatca gaaattgatg agaatggcag cgatggaggt tggaacggag gtgaaagtcg
 361 aggaagagga cgcggtggtt tccgtggtgg ttttcgcagt ggctcccgtg atgaaaatga
 421 tgaaaataga aatgatgatg gttggaaagg aggtgaaagc cgaggtagag gtcgaggtgg
 481 tttcgggggt agttttcgtg gaggtttccg tgatggtggt aatgaagaca ctgggagaag
 541 aggctttgga agagaaaata atgaaaatgg aaacgatgag ggaggagaag gcagaggaag
 601 aggtcgtggt ggtttccggg gtggttttcg tgatggtggt ggtgatgaga gtggaaaaag
 661 aggcttcgga agaggaggtt ttagaggccg gaatgaggaa gtattttcca aggtcacaac
 721 tgcagacaag ttggatcaag aaggaagtga aaatgcagga cccaaggttg tttatgtgcc
 781 gccgcctcct ccagaggagg agagctcgat attctcccat tatgcaacag gcattaattt
 841 tgacaaatat gatgatattc ttgtggacgt gagtggcagc aatcctccaa aagcaattat
 901 gacttttgag gaagcaggac tttgtgactc actgagcaaa aatgtatcaa agtctggata
 961 tgtgaagcct acacctgttc agaaacatgg cattcccatc atttcagctg gacgggatct
1021 aatggcttgt gctcagactg gatcaggaaa aacggcggcc ttcctgctgc ctatcctaca
1081 gcgctttatg actgatggtg tggcagccag caagttcagt gagatacagg agcctgaggc
1141 cataatcgtg gctcccacca gagaacttat caatcagatc tatctggagg ccaggaagtt
1201 tgcatacggg acctgtgtac gacctgttgt ggtttatgga ggtataaata ctggatatac
1261 tatccgagag gtgttaaagg gctgcaatgt tctgtgtgct actcctggaa gattgcatga
1321 cctcattggt cgtggaaaga ttggcctgag taaagtgcgc tatctagttc tggatgaagc
1381 agacagaatg ctggacatgg gctttgagcc agaaatgcgc aaactggtgg cgtctcctgg
1441 tatgccttca aaagaggaac gacaaaccct catgttcagt gccacctacc ctgaagatat
1501 tcaaagaatg gctgctgact ttcttaaagt ggactatatt ttccttgctg ttggtgtggt
1561 gggtggagca tgcagtgatg tggagcaaac cgttgttcag gtggaccagt actcaaagag
1621 ggaccagctg cttgaattgc tcagagcaac aggtaatgag cgcacaatgg tttttgtgga
1681 aaccaaaaga agtgctgatt tcatagcaac atttctctgt caagagaaga tctcaaccac
1741 aagcatccat ggtgatcggg aacagcgaga gcgagagaaa gctctcagtg attttcgcct
1801 tggccactgt ccggttctgg tcgccacatc tgtagctgct agaggcctgg atattgagca
1861 agtccagcat gttgtgaatt ttgacatgcc cagcagcatc gatgagtatg tccatcgcat
1921 aggaagaact ggacgctgtg ggaacaccgg tcgcgccgtg tccttttta acccagagtc
1981 tgacactcca ctagctcgct ccctggtcaa agtcctttca ggggcccaac aagtagttcc
2041 aaaatggctg gaggaagttg ccttcagtgc tcatggcaca acaggcttca acccacgtgg
2101 aaaggtgttt gcatctacag actcgcggaa gggaggatcc tttaagagcg atgagccgcc
2161 accatcacaa acatctgccc cgagcgcagc agctgctgca gacgatgagg aatgggaata
2221 actggcctca cacctgttat atttattttta tttttatttt atttgtgcga gcttcttcaa
2281 taccatttca ggatatttgt taatgttgaa tgactaaagt agcattagga taaagctgtt
2341 gtatttagag tcacattgaa tgctgtaggt ttgacctcaa ggacgataat caagactaat
2401 accttttggc agtttgattt gatcatcttt ttggtatcac tcgtttggac tggagcacaa
2461 ctgaattagt ggatttgttt tactagagca caagtgcaga agtgggtggg tttgtttaat
2521 cacattttaa cacttttttgc taggagtgta ttgagttttg taagctttga cctaaaggtg
2581 tttcctacag ttaaatctat taatcagttc tattgttgat tgtgactgtt tgtaggttat
2641 ttttcttgac atttccgtct tgaagccaga gtatagaaca agaaacttgt tttgcagatg
2701 taccttgcca gataaaggta gctaaagtca ttgtttaaca gacatctctt taattttaaa
2761 gtcaaaatgt tgataaaatt cagtcaagag gcagtgactg actgtaacag agcggtgctt
2821 cctcactagc tgaagtggct caaaataaag acggatactg gtgac
```
//

NCBI

Entrez   PubMed   Nucleotide   Protein   Genome   Structure   PMC   Taxonomy   Books

Search Nucleotide ▦ for [   ] Go Clear

Limits   Preview/Index   History   Clipboard   Details

Display | default ▦ Show: 20 ▦ Send to | File ▦ Get Subsequence Features

☐ **1:** Y12007. D.rerio vlg (vasa...[gi:2558534]   Links

```
LOCUS       DRY12007                2492 bp    mRNA    linear   VRT 09-OCT-1997
DEFINITION  D.rerio vlg (vasa like gene) mRNA for putative RNA helicase.
ACCESSION   Y12007
VERSION     Y12007.1  GI:2558534
KEYWORDS    RNA helicase; vasa gene; vlg gene.
SOURCE      Danio rerio (zebrafish)
  ORGANISM  Danio rerio
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
            Cypriniformes; Cyprinidae; Danio.
REFERENCE   1
  AUTHORS   Olsen,L.C., Aasland,R. and Fjose,A.
  TITLE     A vasa-like gene in zebrafish identifies putative primordial germ
            cells
  JOURNAL   Mech. Dev. 66 (1-2), 95-105 (1997)
  MEDLINE   98025484
   PUBMED   9376327
REFERENCE   2  (bases 1 to 2492)
  AUTHORS   Olsen,L.C.
  TITLE     Direct Submission
  JOURNAL   Submitted (24-MAR-1997) L.C. Olsen, University of Bergen,
            Department of Molecular Biology, Thormoehlensgt 55, N-5020 Bergen,
            NORWAY
FEATURES             Location/Qualifiers
     source          1..2492
                     /organism="Danio rerio"
                     /mol_type="mRNA"
                     /db_xref="taxon:7955"
                     /dev_stage="embryonic, late blastula"
     gene            1..2492
                     /gene="vlg"
     CDS             36..2138
                     /gene="vlg"
                     /note="vasa-like gene
                     putative"
                     /codon_start=1
                     /evidence=not_experimental
                     /product="RNA helicase (DEAD box)"
                     /protein_id="CAA72735.1"
                     /db_xref="GI:2558535"
                     /db_xref="GOA:O42378"
                     /db_xref="TrEMBL:O42378"
                     /translation="MDDWEEDQSPVVSCSSGFGGAGNDKSNSEGTEGSSWKMTGDSFR
                     GRGGRGGSRGGRGGF'SGFKSEIDENGSDGGWNGGESRGRGRGGFRGGFRSGSRDENDE
                     NGNDDGWKGGESRGRGRGGFGGGFRGGFRDGGNEDTGRRGFGRENNENGNDEGGEGRG
                     RGRGGFRGGFRDGGGDESGKRGFGRGGFRGRNEEVFSKVTTADKLDQEGSENAGPKVV
                     YVPPPPPEEESSIFSHYATGINFDKYDDILVDVSGSNPPKAIMTFEEAGLCDSLSKNV
                     SKSGYVKPTPVQKHGIPIISAGRDLMACAQTGSGKTAAFLLPILQRFMTDGVAASKFS
                     EIQEPEAIIVAPTRELINQIYLEARKFAYGTCVRPVVVYGGINTGYTIREVLKGCNVL
                     CATPGRLHDLIGRGKIGLSKVRYLVLDEADRMLDMGFEPEMRKLVASPGMPSKEKRQT
                     LMFSATYPEDIQRMAADFLKVDYIFLAVGVVGGACSDVEQTIVQVDQYSKRDQLLELL
                     RATGNERTMVFVETKRSADFIATFLCQEKISTTSIHGDREQREREKALSDFRLGHCPV
```

```
                    LVATSVAARGLDIEQVQHVVNFDMPSSIDEYVHRIGRTGRCGNTGRAVSFFNPESDTP
                    LARSLVKVLSGAQQVVPKWLEEVAFSAHGTTGFNPRGKVFASTDSRKGGSFKSDEPPP
                    SQTSAPSAAAAADDEEWE"
     protein_bind   2255..2277
                    /gene="vlg"
                    /note="similar to nanos response element"
                    /bound_moiety="a putative nanos-dependent factor"
                    /evidence=not_experimental
ORIGIN
        1 cttctgaaaa aaagtctcac ctaaaattac ccaatatgga tgactgggag gaagatcaga
       61 gtcccgttgt gtcttgcagc tcaggatttg gaggcgctgg aaatgacaag tcaaacagtg
      121 aaggtactga aggtagctca tggaaaatga ctggtgattc gtttagggggg agaggaggca
      181 ggggaggatc acgaggaggc agaggaggct ttagcggttt taaatcagaa attgatgaga
      241 atggcagcga tggaggttgg aacggaggtg aaagtcgagg aagaggacgc ggtggtttcc
      301 gtggtggttt tcgcagtggc tcccgtgatg aaaatgatga aatggaaat gatgatggtt
      361 ggaaaggagg tgaaagccga ggtagaggtc gaggtggttt cgggggtggt tttcgtggag
      421 gtttccgtga tggtggtaat gaagacactg ggagaagagg ctttggaaga gaaaataatg
      481 aaaatgggaa cgatgaggga ggagaaggca gaggaagagg tcgtggtggt ttccggggtg
      541 gttttcgtga tggtggtggt gatgagagtg gaaaaagagg cttcggaaga ggaggttta
      601 gaggccggaa tgaggaagta ttttccaagg tcacaactgc agacaagttg gatcaagaag
      661 gaagtgaaaa tgcaggaccc aaggttgttt atgtgccgcc gcctcctcca gaggaggaga
      721 gctcgatatt ctcccattat gcaacaggca ttaattttga caaatatgat gatattcttg
      781 tggacgtgag tggcagcaat cctccaaaag caattatgac ttttgaggaa gcaggacttt
      841 gtgactcact gagcaaaaat gtatcaaagt ctggatatgt gaagcctaca cctgttcaga
      901 aacatggcat tcccatcatt tcagctggac gggatctaat ggcttgtgct cagactggat
      961 caggaaaaac ggcggccttc ctgctgccca tcctacagcg ctttatgact gatggtgtgg
     1021 cagccagcaa gttcagtgag atacaggagc ctgaggccat aatcgtggct cccaccagag
     1081 aacttatcaa tcagatctat ctggaggcca ggaagtttgc atacgggacc tgtgtacgac
     1141 ctgttgtggt ttatggaggt ataaataccg gatatactat ccgagaggtg ttaaagggct
     1201 gcaatgtatt gtgtgctact cctggaagat tgcatgacct cattggtcgt ggaaagattg
     1261 gcctgagtaa agtgcgctat ctagttctgg atgaagcaga cagaatgctg gacatgggct
     1321 ttgagccaga aatgcgcaaa ctggtggcgt ctcctggtat gccttcaaaa gagaaacgac
     1381 aaaccctcat gttcagtgcc acctaccctg aagatattca aagaatggct gctgactttc
     1441 ttaaagtgga ctatattttc cttgctgttg gtgtggtggg tggagcatgc agtgatgtgg
     1501 aacaaaccat tgttcaggtg gaccagtact caaagaggga ccagctgctt gaattgctca
     1561 gagcaacagg taatgagcgc acaatggttt ttgttgaaac caaaagaagt gctgatttca
     1621 tagcaacatt tctctgtcaa gagaagatct caaccacaag catccatggt gatcgggaac
     1681 agcgagagcg agagaaagct ctcagtgatt ttcgccttgg ccactgtccg gttttggtcg
     1741 ccacatctgt agctgctaga ggcctggata ttgagcaagt ccagcatgtt gtgaattttg
     1801 acatgcccag cagcatcgat gagtatgtcc atcgcatagg aagaactgga cgctgtggga
     1861 acaccggtcg ggccgtgtcc tttttttaacc cagagtctga cactccacta gctcgctccc
     1921 tggtcaaagt cctttcaggg gcccaacaag tagttccaaa atggctggag gaagttgcct
     1981 tcagtgctca tgggacaaca ggcttcaacc cacgtgggaa ggtgtttgca tctacagact
     2041 cgcggaaggg aggatccttc aagagcgatg agccgccacc atcacaaaca tctgccccga
     2101 gtgcagcagc tgctgcagac gatgaggaat gggaataact ggcctcaaac ctgttatatt
     2161 tattttattt ttattttatt tgtgcgagct tcttcaatac catttcagga tatttgttaa
     2221 tgttgaatga ctaaagtagc attaggataa agctgttgta tttagagtca cattgaatgc
     2281 tgtaggtttg acctcaagga caataatcaa gactaatacc ttttgtcagt ttgatttgat
     2341 catcttttg gtatcactcg tttggactgg agcacaactg aattagtgga tttgtttttac
     2401 tagagcacaa gtgcagaagt gggtgggttt gtttaatcac attttaacac tttgctagga
     2461 ctaaaaaaaa aaaaaaaaaa aaaaaaaaaa aa
//
```
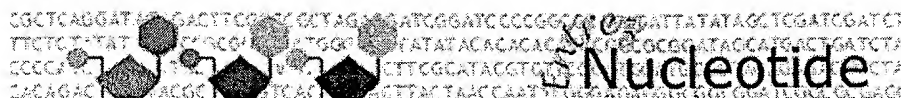
May 3 2004 07:33:01

(20)

☐ **1: AF046043**. Xenopus laevis DE...[gi:2896106]   Links

```
LOCUS       AF046043                2502 bp    mRNA    linear   VRT 19-FEB-1998
DEFINITION  Xenopus laevis DEAD box protein (VLG1) mRNA, complete cds.
ACCESSION   AF046043 S69534
VERSION     AF046043.1  GI:2896106
KEYWORDS    .
SOURCE      Xenopus laevis (African clawed frog)
  ORGANISM  Xenopus laevis
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
            Xenopodinae; Xenopus; Xenopus.
REFERENCE   1  (bases 1 to 2502)
  AUTHORS   Komiya,T., Itoh,K., Ikenishi,K. and Furusawa,M.
  TITLE     Isolation and characterization of a novel gene of the DEAD box
            protein family which is specifically expressed in germ cells of
            Xenopus laevis
  JOURNAL   Dev. Biol. 162 (2), 354-363 (1994)
  MEDLINE   94200507
   PUBMED   8150200
REFERENCE   2  (bases 1 to 2502)
  AUTHORS   Komiya,T.
  TITLE     Direct Submission
  JOURNAL   Submitted (05-FEB-1998) ERATO, JST, Hirohashi Cell Configuration
            Project, 5-9-9 Tokodai, Tsukuba 300-26, Japan
COMMENT     On Feb 19, 1998 this sequence version replaced gi:546292.
FEATURES             Location/Qualifiers
     source          1..2502
                     /organism="Xenopus laevis"
                     /mol_type="mRNA"
                     /db_xref="taxon:8355"
                     /cell_type="germ cells"
     gene            1..2502
                     /gene="VLG1"
                     /note="similar to Drosophila vasa-like gene"
     5'UTR           1..65
                     /gene="VLG1"
     CDS             66..2168
                     /gene="VLG1"
                     /codon_start=1
                     /product="DEAD box protein"
                     /protein_id="AAC03114.1"
                     /db_xref="GI:2896107"
                     /translation="MEENWDTEIETEKPTYVPNFSTLETENTDNYSAYSNNDINNQNY
                     DSERSFGNRGGYRSERSRPSNFNRGSRTERGRGRGFGTNRNDNYSSERDVFGDDERDQ
                     RRGFPGRGGYNGNEDGQKPNAFRGRGGFRNENEQRRGFGERGGFRSENGQRNFDNRGD
                     FGNSGEEEDRPRSYGRGGFNNSDTGGRGRRGGRGGGSQYGGYKGRNEEVGVESGKSQE
                     EGNEKDEKPKKVTYIPPPPPDGEDNIFRQYQSGINFDKYDEILVDVTGKDVPPAILTF
                     EEANLCETLRRNVARAGYVKLTPVQKHSIPIIMAGRDLMACAQTGSGKTAAFLLPILS
                     YMMNEGITASQYLQLQEPEAIIIAPTRELINQIYLDARKFSYGTCVRPVVVYGGIQPV
                     HAMRDVEKGCNILCATPGRLLDIVSKEKIGLSKLRYLVLDEADRMLDMGFAPEIEKLM
                     TKPGMPTKEKRQTLMFSATYPEEIRRLASNYLKSEHLFVVVGLVGGACSDVAQTVLEM
                     RENGKMEKLLEILKSSEKERTMIFVNTKKKADFIAGYLCQEKFSSTSIHGDREQYQRE
                     SALWDFRTGKCTVIVCTAVAARGLDIENVQHVINYDVPKEVDEYVHRIGRTGRCGNTG
```

KATSFFNVQDDHVIARPLVKILTDAHQEVPAWLEEIAFGGHGALNSFYAADSMGEQAG
GNAVTTPSFAQEEEASWD"

3'UTR   2169..2502
              /gene="VLG1"
GIN

```
    1 gattcaggag ctttcctgga gtctcgcttg atagtcacct gcaagttggg cagattaaac
   61 cgagaatgga ggaaaactgg gatactgaaa ttgaaactga aaaaccaact tatgtaccga
  121 atttcagtac cttggagacc gaaaatacag ataattacag tgcctactct aacaatgata
  181 tcaacaatca aaattatgat tctgaaagaa gttttggaaa ccgaggaggt tatcggtctg
  241 aaaggagtag gcctagtaat tttaacagag gtagtcgaac tgaaagggga agaggacgag
  301 ggtttggtac taatcgaaat gataattatt cttctgagag agatgtgttt ggagatgatg
  361 agagggatca acgcagaggg tttccaggca gaggtggata taatggcaat gaagatggac
  421 agaaacctaa tgcctttcga ggaagaggtg ggttcagaaa tgagaatgaa cagcgtcgag
  481 gctttggaga aagaggagga tttagaagcg agaatggaca gcgaaacttt gataacagag
  541 gagattttgg taattctggt gaagaagagg atcgtccacg ttcttatggg agaggtggtt
  601 ttaacaactc tgatactggt ggaagaggac gaagaggtgg ccgaggtggt ggaagccagt
  661 atggtggata caaaggaaga aatgaagaag ttggtgtaga atctggaaaa agtcaagaag
  721 aaggaaatga aaaagatgaa aaaccaaaaa aggtgaccta tattcctccg cctccacctg
  781 atggtgaaga taatatattc cggcaatacc agtctggaat caattttgat aaatatgatg
  841 agattcttgt tgatgtgaca ggaaaggatg ttcctcctgc catactgact tttgaagaag
  901 ctaacctttg tgaaacacta agaagaaatg ttgctagagc tggatatgta aagctaacac
  961 cagtgcagaa acacagcatc cctattataa tggctggtcg tgatttaatg gcttgcgcac
 1021 agactggttc tggtaaaact gctgctttt c ttttgccaat tctcagttat atgatgaatg
 1081 aaggaattac agctagtcag tatttacaac ttcaggaacc agaagccata attattgccc
 1141 ctaccagaga acttattaac cagatatatc tcgatgctcg aaaattttca tatggaacct
 1201 gcgtgcgtcc agtagttgta tatggtggta tacaacctgt acatgcaatg agggacgttg
 1261 aaaaagggtg caatatactt tgtgcaaccc ctggaagatt gctggacata gtaagcaaag
 1321 aaaaaattgg cttaagtaag ctaagatatc tagttctgga tgaagcggat cgcatgttgg
 1381 atatgggatt tgccccggaa atagaaaaat taatgacaaa gccaggaatg ccaacaaaag
 1441 aaaagcgaca aacactaatg ttcagtgcta cctatcctga ggaaattcgg aggttggctt
 1501 cgaattattt gaaatctgaa catttgtttg ttgtggtcgg attagttgga ggagcttgta
 1561 gtgatgtggc acaaacagtt cttgaaatgc gagaaaatgg aaagatggaa aagctacttg
 1621 aaattctgaa aagctcagag aaagagcgaa ctatgatttt tgtgaataca aaaaagaagg
 1681 cagatttttat tgctggttac ctttgtcaag agaaattttc atcaacaagc attcacggtg
 1741 atagagaaca ataccaaaga gagagtgctc tctgggattt cagaactgga aagtgtactg
 1801 ttattgtctg cacagcagtt gctgccagag gcttggatat tgaaaatgtt caacacgtga
 1861 taaattatga cgttcctaag gaagttgatg agtacgtcca tagaattggt cgtaccggtc
 1921 gctgtggtaa caccggaaag gcaacatcat ttttcaatgt tcaggatgac catgtgattg
 1981 ctcgtcccct tgtgaaaatt cttaccgatg ctcatcaaga agtccctgct ggttagaag
 2041 aaattgcctt tggggggccat ggagctttga atagctttta tgcagcggac tctatgggcg
 2101 aacaggccgg aggaaatgcc gtcactactc cttcattcgc acaagaagaa gaggctagct
 2161 gggattaaat agtagaatca aattgcagaa ttcaaatatt gttaaaatgt ttaaaaagaa
 2221 atcttgtttt ataacatctt ttccaagagc tgaaatgacg aaaaaactcc ttatgtgaga
 2281 attatcaatc gcaagcagag caagttattt gatttagttt gaacctttaa gagaatgtgt
 2341 ttacattcaa cttggccatc atttattttca ttaaaacctt tattgtttaa ctgcaactga
 2401 aagtttgact tgtataatta ttaaaccaag ttttgtttgc tttttcttcc aaaacaagca
 2461 ccaataaacc cacatcattc tgaaccgaaa aaaaaaaaaa aa
```

BLANK SHEET(USPTO)

BLANK SHEET(USPTO)